Introductions - David, Melinda, Tom Jelley, Scott Bryer, James Robb, Barclay Jackson, Kathy Brockett, Becky Ohler, Joe Broyles

James Robb - sent event notice - next Friday = 1st annual cellulosic biofuels conference in Amherst, MA
Presenters - NE Biofuels Collaborative
Mascoma Corp

James is going, Nora Traviss and Chris Langille are also going.

Next meeting - distribution
Becky, Tom Jelley, Bill Dusavith, Mike Walsh will meet before then and come to meeting prepared to discuss issues associated with 5% requirement
Would be good to have John Rymes and another distributor

Presentation by Melinda Treadwell: Petroleum Diesel Engine Emissions: Air Quality and the Public Health Impacts and the Biodiesel Alternative

- have been doing some work on getting the message to "lay people" that she can share with the commission
- background and why KSC is so supportive of biodiesel and so involved in Keene BBR facility
- biodiesel toxicology - not non-toxic, just far less toxic than diesel
- diesel versus gasoline from a toxicology stand point = fine particles in diesel exhaust that carry toxic compounds into the lungs.
- expansion of diesel to light duty fleet increases exposure to the general population
- health impacts from diesel exhaust mirror those of fine particles, but happens at lower dose due to accompanying toxics exposure
- pollutants of concern
    - fine particles (nano particles?) 4-53% of all PM2.5
    - irritant gases 40-90%
    - cancer causing mixture 70% of cancer risk in LA basin
- 20 ug/m3 increase in concentration of fine particles is associated with 5% increase in hospital admissions
- construction work increases exposure to people in the area by 1 to 16 times (property boundary test so about 300 feet) Workers having higher exposure. This includes all PM (dust, exhaust, etc). Looking at just diesel exhaust = 6x higher
- Ski area snowmaking - exposures are HUGE! Federal standard = 243 ug/m3. Federal standard = 35 ug/m3. This was using new compressors.
- temp of combustion has big impact - higher temp = lower PM
- Central question of KSC research:
    - does B20 use lower emissions of: PM2.5, elemental/organic compounds/NOx
- Used Keene recycling center - saw a 62% reduction in PM2.5!
- 20% reduction in elemental carbon
- organic carbon increasing by about 370%. Not sure yet what this is. They believe it is a free fatty acid, but will be categorizing this over the next 6 months

- KSC results did not show any change in NOx emissions

Monadnock Biodiesel Collaborative - 250 mil gal/yr, continued exposure study, fuel quality testing. Facility will be BQ9000 certified. This facility will be doing waste grease, so will see if results are the same. Will also look at emission profile from other base sources.
November 1 = breaking ground, producing by January
Fuel quality lab by spring.
Nashua facility is up and running now, need one final plumbing permit = brown grease to biodiesel facility.

Keene = 20,000 gallons/year
KSC = ?
use 450,000 gallons heating oil each year.
home heating assistance ~ 25,000/yr
looking to do 5% bioheat
currently discussing with Rymes and Evans

Outreach Discussion
key words: do we need to use different words than "green"
innovative
alternative
cleaner

Study Commission goal: